

Attorney's Docket No.: 15670-009001
Client's Ref. No.: SD 2001-051

OFFICIAL COMMUNICATION

FACSIMILE

FOR THE PERSONAL ATTENTION OF:

EXAMINER AKM E. ULLAH

U.S. PATENT AND TRADEMARK OFFICE (PATENT)

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Number of pages including this page 15

Applicant : Mark Wang et al.
Serial No. : 09/998,012
Filed : November 28, 2001

Art Unit : 2874
Examiner : Akm Ullah

FACSIMILE COMMUNICATION

Title : Optical Switching and Sorting of Biological Samples and Microparticles
Transported in a Micro-fluid Device, Including Integrated Bio-chip Devices

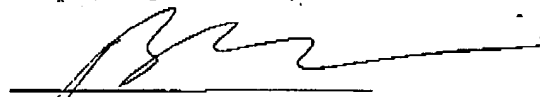
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached to this facsimile communication cover sheet is a Request for Initialed PTO Form 1449, faxed this 6th day of January 2004, to the United States Patent and Trademark Office.

Respectfully submitted,

Date: January 5, 2004


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Attorney's Docket No.: 15670-009001 / SD 2001-051

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Mark Wang et al. Art Unit : 2874
Serial No.: 09/998,012 Examiner : Akm E. Ullah
Filed : November 28, 2001
Title : OPTICAL SWITCHING AND SORTING OF BIOLOGICAL SAMPLES
AND MICROPARTICLES TRANSPORTED IN A MICRO-FLUID
DEVICE, INCLUDING INTEGRATED BIO-CHIP DEVICES

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR INITIALED PTO FORM 1449

Upon reviewing the file, applicants noted that they have not received an initialed copy of the enclosed PTO Forms 1449 that accompanied information disclosure statements filed June 4, 2003, June 18, 2003 and September 16, 2003.

Applicants' records show that these information disclosure statements complied with 37 CFR 1.97. Thus, we respectfully request that the examiner initial and return the attached forms as soon as possible. Note, applicants must pay the issue fee by

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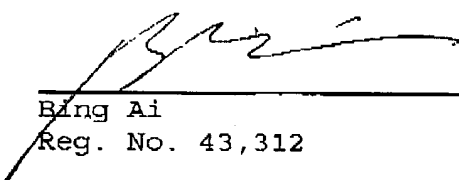
Name of Person Signing Certificate

Attorney's Docket No.: 15670-009001 / SD
2001-051

March 15, 2004, so the examiner's prompt attention to this matter would be appreciated.

Respectfully submitted,

Date: January 6, 2004


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Sheet 1 of 1

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-009001	Application No. 09/998,012
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mark Wang et al.	
		Filing Date November 28, 2001	Group Art Unit 2874

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,221,654	4/24/2001	QUAKE ET AL.			
	AB	2002/0005354	1/17/2002	SPENCE ET AL.			
	AC	6,344,325	2/5/2002	QUAKE ET AL.			
	AD	2002/0058332	5/16/2002	QUAKE ET AL.			
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL	WO 99/61888	2/12/1999	WIPO				
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)		
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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Disclosure Form (PTO-1449)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	09/998,012
Filing Date	November 28, 2001
First Named Inventor	Mark Wang et al.
Group Art Unit	2874
Examiner Name	AKM ULLAH
Attorney Docket Number	15670-009001

Examiner Initials *	U.S. Patent Document Number Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	US-3558077	Pressman	01/26/71	
	US-3628182	Ashkin et al	12/14/71	
	US-3638139	Ashkin et al	01/25/72	
	US-3682183	Ashkin et al	05/09/72	
	US-3710279	Ashkin	01/09/73	
	US-3725810	Ashkin et al	04/03/73	
	US-3761721	Altshuler et al	08/25/73	
	US-3778612	Ashkin	12/11/73	
	US-3783541	Ashkin et al	02/19/74	
	US-3808432	Ashkin	04/30/74	
	US-3808550	Ashkin	04/30/74	
	US-4063106	Ashkin et al	12/13/77	
	US-4092536	Ashkin et al	05/30/78	
	US-4127329	Chang et al	11/28/78	
	US-4247816	Larson et al	01/27/81	
	US-4253848	Smythe et al	03/03/81	
	US-4327288	Ashkin et al	04/27/82	
	US-4366274	Altshuler	05/31/83	
	US-4390403	Batchelder	06/28/83	
	US-4440636	Judy et al	04/03/84	
	US-4451412	Loiseaux et al	05/28/84	
	US-4453805	Ashkin et al	08/12/84	
	US-4520484	Huignard et al	05/28/85	
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	US-4827125	Goldstein	05/02/88	
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	US-4883888	Ashkin	01/18/90	
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	US-5029781	Ceccon et al	07/08/91	
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	US-5283417	Misawa et al	02/01/94	
	US-5308970	Misawa et al	05/03/94	
	US-5327515	Anderson et al	07/05/94	

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Sheet 2 of 10

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	Number	Kind Code ² (if known)			
	US-5337324		Ohtsu et al	08/09/94	
	US-5338930		Chu et al	08/16/94	
	US-5343038		Nishiwaki et al	08/30/94	
	US-5355252		Haraguichi	10/11/94	
	US-5360764		Colotta et al	11/01/94	
	US-5363190		Inaba et al	11/08/94	
	US-5364744		Buican et al	11/15/94	
	US-5374588		Iranmanesh	12/20/94	
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	US-5452129		Asher et al	09/19/95	
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	US-5625484		Courtois et al	04/29/97	
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	US-5939718		Neal	09/17/99	
	US-5942443		Parce et al	08/24/99	
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	US-5993632		Becker et al	11/30/99	
	US-6015714		Baldarelli et al	01/18/00	

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Sheet 3 of 10

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Application Number	09/998,012
Filing Date	November 28, 2001
First Named Inventor	Mark Wang et al.
Group Art Unit	2874
Examiner Name	AKM ULLAH
Attorney Docket Number	15870-009001

Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Number	Kind Code ² (if known)			
	US-6033546		Ramsey	03/07/00	
	US-6055106		Grier et al	04/25/00	
	US-6067859		Kas et al	05/30/00	
	US-6071394		Cheng et al	06/06/00	
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	US-6083097		Uhl	07/11/00	
	US-6083376		O'Brien et al	07/11/00	
	US-6096509		Okun et al	08/01/00	
	US-6111396		Graham	08/28/00	
	US-6121603		Hang et al	09/19/00	
	US-6139831		Shivashankar et al	10/31/00	
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	US-6143559		Kopelman et al	11/07/00	
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	US-6215134	B1	O'Brien et al	04/10/01	
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	US-6260990	B1	Carr	08/28/01	
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	US-2002/0058332	A1	Quake et al	05/16/02	
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	Office ³	Number ⁴	Kind Code ⁵ (if known)				
	WO	94/08221	A1	Warburton	04/14/94		
	WO	97/21832	A1	Eigen et al	06/19/97		
	WO	99/39190	A1	Hefli	08/05/99		
	WO	99/61888	A2	Quake et al	12/02/99		
	WO	00/23825	A2	Renn et al	04/27/00		
	WO	00/45160	A1	Hefli	08/03/00		
	WO	00/45170	A2	Hefli	08/03/00		
	WO	00/45179	A2	Zuker et al	08/03/00		

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 4 of 10

Complete If Known

Application Number	09/998,012
Filing Date	November 28, 2001
First Named Inventor	Mark Wang et al.
Group Art Unit	2874
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	Office ²	Number ⁴	Kind Code ⁵ (if known)				
	WO	00/54882	A1	Zhu et al	09/21/00		
	WO	01/05514	A1	Lock et al	01/25/01		
	WO	01/09606	A1	Hefti	02/08/01		
	WO	01/11333	A2	Ransom et al	02/15/01		
	WO	01/14870	A1	Becker et al	03/01/01		
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	JP	03101419	A	Kudome et al	04/26/91		abst
	JP	05088107	A	Ogasawara	04/09/93		abst
	JP	05232398	A	Isaka	09/10/93		abst
	JP	06123886	A	Higure et al	05/06/94		abst
	JP	06132000	A	Haraguchi et al	05/13/94		abst
	JP	08234110	A	Otaki et al	09/13/96		abst
	JP	09043434	A	Yasuda et al	02/14/97		abst
	JP	10048102	A	Ikedo et al	02/20/98		abst
	JP	10062332	A	Kano et al	03/06/98		abst
	JP	11218691	A	Yasuda et al	08/10/99		abst

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume--issue number(s), publisher, city and/or country where published.	T ²
	ACKERSON et al, "Radiation Pressure As A Technique For Manipulating The Particle Order In Colloidal Suspensions", Faraday Discuss. Chem. Soc., 83, 1987, 309-316.	
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	ASHER et al, "Crystalline Colloidal Bragg Diffraction Devices: The Basis For A New Generation Of Raman Instrumentation", Spectroscopy, 1, 12, 1986, 26-31.	
	ASHKIN, "Acceleration & Trapping Of Particles by Radiation Pressure", Physical Review Letters, 24, 4, January 26, 1970, 158-159.	
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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/998,012
		Filing Date	November 28, 2001
		First Named Inventor	Mark Wang et al.
		Group Art Unit	2874
		Examiner Name	AKM ULLAH
		Attorney Docket Number	15670-009001
Sheet	5	of	10

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	ASHKIN, "Forces Of A Single Beam Gradient Laser Trap On A Dielectric Sphere In The Ray Optics Regime", Biophys.J., 61, February 1992, 569-582.	
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	ASHKIN et al, "Optical Levitation By Radiation Pressure", Appl. Phys. Lett., 19, 8, October 15, 1971, 283-285.	
	ASHKIN, "Optical Trapping & Manipulation Of Neutral Particles Using Lasers", Proc. Natl. Acad. Sci. USA, 94, 10, May 13, 1997, 4853-4860.	
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	BURNS et al, "Optical Matter: Crystallization & Binding In Intense Optical Fields", Science, 249, 4970, August 17, 1990, 749-754.	

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PTO/SB/08A (08-00)

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		Attorney Docket Number	15670-009001
Sheet	6	of	10

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/998,012
		Filing Date	November 28, 2001
		First Named Inventor	Mark Wang et al.
		Group Art Unit	2874
		Examiner Name	AKM ULLAH
Sheet	7	of	10
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	Applicant Mark Wang et al.		
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5674743	10/7/1997	Ulmer			
	AB	6159749	12/12/2000	Liu			
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Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AM	Li, et al.; Transport, Manipulations, and Reaction of Biological Cells On-Chip Using Electrokinetic Effects; April 15, 1997; Analytical Chemistry, Vol. 69, No. 8, pgs. 1564-1568
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